

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: Appeal to the Board of Patent Appeals and Interferences

AF  
PATENT  
APPLICATION

In re PATENT APPLICATION of

Inventor(s): MARTIN et al.

Appln. No.: 09

Series Code ↑

291,983

Serial No. ↑

Filed: April 15, 1999

Title: LOW PROFILE HACKSAW

Group Art Unit: 3724

Examiner.: C. Dexter

Atty. Dkt. P 259035

M#

HT-3031

Client Ref

Hon. Commissioner of Patents  
Washington, D.C. 20231

Date: September 25, 2002

RECEIVED

SEP 30 2002

Sir:

TECHNOLOGY CENTER R3700

1. ☐ **NOTICE OF APPEAL:** Applicant hereby appeals to the Board of Patent Appeals and Interferences from the decision (not Advisory Action) dated \_\_\_\_\_ of the Examiner twice/finally rejecting claim(s) in this application or in this application and its parent application.
2. ☒ **BRIEF** on appeal in this application attached in triplicate (extendable up to 5 months).
3. ☐ An **ORAL HEARING** is respectfully requested under Rule 194 (due two months after Examiner's Answer- unextendable)
4. ☐ Reply Brief is attached in triplicate (due two months after Examiner's Answer - unextendable).
5. ☐ "Small entity" statement filed: ☐ herewith. ☐ previously.
6. ☐ Fee **NOT** required because paid in prior appeal in which the Board of Patent Appeals and Interferences did not render a decision on the merits (35 USC 134).

## 7. FEE CALCULATION

	Large/Small Entity	Fee Code
If box 1 above is X'd, ..... enter	\$320/160	\$0 119/219
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<b>8. Original due date: July 10, 2002</b>		
9. Petition is hereby made to extend the original due date (1 mo) \$110/\$55		115/215
to cover the date this response is filed for which the (2 mos) \$400/\$200		116/216
requisite fee is attached. (3 mos) \$920/\$460		117/217
(4 mos) \$1,440/\$720		118/218
(Usable only if box 2 is X'd--- 5 mos) \$1,960/\$980	+\$0	128/228
10. Enter any previous extension fee paid <input type="checkbox"/> previously since above		
Original due date (item 8); <input type="checkbox"/> with concurrently filed amendment .....	-\$0	
11. Subtract line 10 from line 9 and enter: Total Extension Fee		+\$0
12. TOTAL FEE =		\$0

(Our Deposit Account No. 03-3975)

(Our Order No. \_\_\_\_\_)

81427

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**CHARGE STATEMENT:** The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a duplicate copy of this sheet is attached. This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of

**MARTIN et al.**

Group Art Unit: 3724

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\* \* \* \* \*

September 25, 2002

**APPEAL BRIEF**

Hon. Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

Sir:

Applicant hereby submits in triplicate this Appeal Brief appealing the rejection of claims 1, 3-9, 16, and 23 of the present application, the Notice of Appeal having been filed on May 10, 2002.

I. Real Parties In Interest

The real party in interest is the assignee The Stanley Works.

II. Related Appeals and Interferences

There are no related appeals or interferences.

III. Status of the Claims

Claims 1 and 3-23 are currently pending in the present application, of which claim 1 is the only independent claim. Dependent claims 10-15 and 17-22 have been withdrawn from consideration due a species election. The remaining claims, namely claims 1, 3-9, 16, and 23, stand finally rejected as set forth in the Official Action mailed January 24, 2001. The final rejection of these claims is the subject of this appeal.

#### IV. Status of Amendments

All amendments filed in the present application have been entered. The attached Appendix sets forth the claims currently pending in the present application, with the exception of those that have been withdrawn from consideration, namely dependent claims 10-15 and 17-22.

#### V. Summary of the Invention

The claimed invention relates generally to hacksaws, and more particularly to a hacksaw 10, 110 having an improved frame. As defined in claim 1, as currently pending, the hacksaw comprises: (a) an elongated blade 16, 116; (b) a hacksaw frame assembly comprising a rigid I-beam frame member and a manually engageable handle 14 connected to the frame member 12, 112; (c) a first blade mounting structure 35 carried on the hacksaw frame assembly; and (d) a releasable blade tensioning device 42 providing a second blade mounting structure 44. The rigid I-beam frame member 12, 112 has upper and lower end caps 24, 26, 124, 126 and a generally vertical web member 28, 128 extending therebetween (see page 4, line 32- page 4, line 1). This frame member 12, 112 has a forward end portion 20, a maximum height portion M, and an arcuate portion 22, 122, 123 defined along at least one arc 23 having a center of curvature located below the blade 16, 116. The arcuate portion 22, 122, 123 extends substantially the entire length between the forward end portion 20 and the maximum height portion M to provide the hacksaw 10 with a lower overall height at the forward end portion 2, 20 (see page 4, lines 5-18).

One of the first and second mounting structures 35, 44 is provided on the forward end portion 20 of the frame member 12, 112 such that the tension in the blade 16, 116, caused by relative tensioning movement of the blade mounting structures 35, 44, applies a rearwardly directed load to the forward end portion 20 (see page 7, lines 23-27). This creates a bending movement that is distributed along the arcuate portion 22, 122, 123. The upper end cap 24, 124 is subject to tension and the lower end cap 26, 126 is subject to compression so that they cooperate to resist deflection (see page 3, lines 7-12).

The use of an I-beam in this construction is particularly advantageous because the I-beam provides the frame 12 with increased rigidity without significantly increasing the overall weight of the hacksaw 10 (see page 3, lines 7-12).

The use of reference numerals herein is solely for convenience in understanding the invention by reference to the examples illustrated application drawings, and in no way should they be considered as limiting the claims to the disclosed embodiments.

## VI. Issues

The issues which the Applicants appeal are:

(1) whether claims 1, 3-9, 16, and 23, are patentable under §103(a) over U.S. Patent No. 3,329,186 to David in view of U.S. Patent No. 679,653 to Wells; and

(2) whether claims 1, 3-9, 16 and 23 are patentable under the judicially created doctrine of obviousness type double patenting over U.S. Design Patent No. 403,224 to Martin et al. in view of U.S. Patent No. 4,349,059 to Hepworth.

## VII. Grouping of Claims

Claims 1 and 23 stand or fall together. Claims 3-9 and 16 are each separately patentable.

## VII. Argument

### A. Summary of the Argument

With respect to the obviousness rejection under Section 103, the Applicants submit that the Examiner has failed to establish the prima facie case of obviousness, and further the Applicants have provided evidence of superior results that would rebut any properly made prima facie case of obviousness. Specifically, the Examiner has failed to cite any evidence in the record that provides a motivation or suggestion for combining U.S. Patent No. 3,329,186 to David (“David”) and U.S. Patent No. 679,653 to Wells (“Wells”). Further, the Examiner has improperly combined David and Wells in a manner that negates teachings in Wells that are characterized as being essential.

With respect to the double-patenting rejection, the Applicants submit that the Examiner has failed to establish that the claims of this utility application and the design claim set forth in U.S. Design Patent No. 403,224 to Martin et al. (“Martin et al.”) are obvious variations of one another under the two-way double-patenting test for the design/utility context as set forth in Carman Industries, Inc. v. Wahl, 724 F.2d 932 (1983).

### B. Detailed Discussion of the Argument

First, the rejections under Section 103 will be discussed, and thereafter the double-patenting rejections will be discussed.

1. Section 103 Rejections

As set forth in M.P.E.P. §2143, to establish a prima facie case of obviousness, the Examiner must meet three basic criteria:

1. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.
2. There must be a reasonable expectation of success.
3. The prior art reference (or references when combined) must teach or suggest all the claim limitations.

In the present application, the Applicant submits that the Examiner has failed to establish at least the first prong of the prima facie case of obviousness. Specifically, the Examiner has failed to cite any evidence in the record that provides a motivation or suggestion for combining David and Wells.

The Examiner relies on the combination of David and Wells as rendering the subject matter of claim 1 obvious. Specifically, the Examiner cites David as disclosing the basic concept of a hacksaw with a frame constructed in an I-beam configuration with upper and lower end caps. The frame in David, however, has a sharp bend towards the front end thereof. As a result, when the blade is tensioned so as to apply a rearwardly directed load to the front end of the frame, the bending moment created in the frame member is focused at that sharp bend. The Examiner cites Wells as disclosing a hacksaw with an arcuate frame member. However, the frame member is tubular and does not have an I-beam configuration. In the Final Official Action of January 24, 2002, the Examiner asserted that "it would have been obvious to one having ordinary skill in the art to provide the frame member of David with the claimed arcuate portion for providing an efficient design along with the other well known benefits described above as well as those taught by Wells."

Under the three-pronged obviousness test set forth above, the first prong requires the Examiner to establish that there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine reference teachings. See In re Fine, 837 F.2d 1072 (Fed. Cir. 1988) (holding that Board of Patent Appeals & Interference erroneously upheld rejection of claims where

prior art references failed to disclose a material limitation of the claims and that there was no evidence supporting the Board's assertion that the art showed a motivation or suggestion to combine references); see also M.P.E.P. §2143.03. Specifically, the Examiner must establish that there is a suggestion or motivation to combine David and Wells together. It is not sufficient to simply cite references that are capable of being combined to establish the prima facie case of obviousness; instead the Examiner establish a motivation or suggestion to combine the references as asserted. See In re Mills, 916 F.2d 680 (Fed. Cir. 1990); see also, M.P.E.P. §2143.01. Further, the Examiner is required to cite evidence, either in the references themselves or in the knowledge generally available to one skilled in the art, to support his assertions underlying the prima facie case of obviousness. See In re Werner Kotzab, 217 F.3d 1365, 1371 (Fed.Cir. 2000). This applies to all the elements of the prima facie case of obviousness, including establishing a motivation or suggestion to combine references. It is submitted that this record lacks evidence of such a suggestion or motivation.

In establishing the first prong of the prima facie obviousness case, namely the provision of a motivation or suggestion, the Examiner must consider each prior art reference as a whole, and cannot pick only those portions that support his position. As stated by the CCPA in In re Wesslau, "it is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." 353 F.2d 238, 241 (CCPA 1965). Thus, the Examiner must consider portions of the prior art that "teach away" from the Applicants' invention. See e.g. Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, 796 F.2d 443, 448 (Fed. Cir. 1986) (reversing obviousness finding and stating district court failed to consider prior art reference in its entirety by ignoring portions that argued against obviousness).

A close review of Wells reveals that it teaches away from the claimed invention, and thus there would be no suggestion to combine the I-beam of David with the arcuate frame of Wells. Specifically, in column 1, line 30 – column 2, line 40, Wells states:

It is the essence of this improvement that this reach should be both curved and tubular, and preferably it should be constructed of wrought-iron piping. It contains a maximum of strength for the purpose in hand with a minimum of weight, and at the same time the curved characteristic and the tubular characteristic combined give the reach just that degree of elasticity which, along with the requisite strength, is admirably adapted for the straining of the saw for actual work.  
(underlining added)

From this text, it is clear that Wells characterizes the tubular shape of the reach (i.e., its frame member) as being part of the “essence” of its improvement. It is the combination of both the “curved characteristic” and the “tubular characteristic” that strain the saw for work. Based on this understanding, it cannot be said that there is a motivation or suggestion to combine the I-beam of David with the curved frame member of Wells. Specifically, because Wells characterizes the tubular shape of the frame member or reach as being essential, or the “essence” of the improvement, one skilled in the art would not be motivated to change to tubular shape of the Wells frame member. Instead, one skilled in the art would be discouraged from combining David and Wells, because to do so would be counter to the teachings of Wells that a frame member that is both tubular and curved is essential. Thus, taking Wells as a whole, it clearly teaches one skilled in the art away from any cross-section other than tubular.

With this understanding of Wells in its entirety, it is clear that the Examiner has simply taken from Wells only enough teaching to support his rejection, and has ignored the remainder of its teachings. Specifically, the Examiner has taken the curvature from Wells to support his rejection, but has ignored the teachings concerning the essential teaching of a tubular cross-section. This, as discussed above, is impermissible.

In the Official Action mailed January 24, 2001, the Examiner attempts to rely on U.S. Patent No. 5,406,760 to Edwards (“Edwards”) as supplying the motivation or suggestion lacking in David and Wells. This is improper for at least two reasons. First, the Examiner did not cite Edwards as part of his rejection. If the Examiner intends to rely on Edwards, he is obligated to apply it in a rejection. Second, Edwards relates to modular office furniture, which clearly cannot be considered analogous art to hacksaws. Even assuming for the sake of argument that Edwards were analogous art, which it is not, the teachings of Edwards do not necessarily negate the teaching away in Wells. Wells is clearly a more relevant reference and one skilled in the art would consider Wells with much more weight than a reference from the office furniture art.

Also, the Examiner has attempted to rely on Official Notice to provide the motivation or suggestion lacking from David and Wells. This is also improper for at least two reasons. First, taking Official Notice does not remove the Examiner’s obligation to consider the teaching away found in Wells. Moreover, Wells is a reference specifically directed to hacksaws, whereas the Examiner’s Official Notice is apparently not derived from any specific knowledge of hacksaws. Clearly, Wells is entitled to more weight. Second, the Applicants have continuously challenged the Examiner’s lack of evidence with respect to

motivation or suggestion, and the Examiner has continued to insist on relying on Official Notice. This is impermissible in view of the CCPA case Application of Albert which stated:

Assertions of technical facts in area of esoteric technology must always be supported by citation to same reference work recognized as standard in the pertinent art and the appellant given, in the Patent Office, the opportunity to challenge the assertion or the notoriety or repute of the cited reference. . . . Allegations concerning specific "knowledge" of the prior art, which might be peculiar to a particular art should also be supported and the appellant similarly given the opportunity to make a challenge. 424 F.2d 1088, 1091 (1970) (citations omitted).

The Applicants have continually challenged the Examiner's failure to cite objective evidence, but the Examiner has insisted on relying on Official Notice, as opposed to citing a relevant reference, or submitting an affidavit per MPEP § 2144.03 supporting his assertion of Official Notice. The closest the Examiner has come in an attempt to meet his challenge is the citation of Edwards, which, as discussed above, has not even been applied in a rejection and is clearly from a non-analogous art. Thus, it is clear that the Examiner's reliance on Official Notice cannot complete his prima facie case of obviousness.

Accordingly, it is submitted that the Examiner has failed to establish the required first prong of the obviousness test. Because the Examiner has failed to establish at least the first prong for the prima facie case of obviousness as set forth above and dictated by controlling law, it is respectfully requested that the Board reverse the Examiner's obviousness rejection against claim 1.

As additional support for patentability, the Applicants filed a Rule 132 Declaration establishing the far superior performance of a hacksaw constructed in accordance with the claimed invention.<sup>1</sup> Specifically, the Declaration shows that the hacksaw of the claimed invention is far superior in terms of permanent set and deflection relative to other known hacksaws. This evidence is submitted to support a proper finding of non-obviousness.

With respect to the separately patentable dependent claims, each of these claims defines a further, advantageous feature of the embodiments disclosed in the present application. Specifically, each of the claims recites further features that provide superior frame performance above and beyond claim 1. However, the Examiner has failed to provide

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<sup>1</sup> The Examiner has not provided any substantive reasoning as to why this Declaration is insufficient or unpersuasive.



any evidence whatsoever supporting a rejection of these claims. In his Official Actions, the Examiner did not address claims 3-5 and 16 beyond stating that they were rejected, and with respect to claims 6-9, he asserted in an unsupported, conclusory fashion that the limitations of these claims were achievable by “routine experimentation.” The Examiner offered no evidence and provided no substantive reasoning for the rejections of these dependent claims. Accordingly, it is submitted that the Examiner has failed to carry the burden for establishing the prima facie obviousness case for these dependent claims, and therefore the Board is requested to reverse these rejections.

For clarity’s sake in complying with 37 C.F.R. 1.192(c)(7), the Applicants wish to emphasize that their position for the separate patentability for each of these dependent claims is that the Examiner has failed to establish a proper prima facie case of obviousness for each of these separately patentable dependent claims.

## 2. Double-Patenting Rejection

In the context of double-patenting between a design patent and a utility application, the proper test is set forth in Carman Industries, Inc. v. Wahl, 724 F.2d 932 (Fed. Cir. 1986). In that case, the Federal Circuit held that the proper inquiry is to ask whether the design and utility claims “cross-read” on one another. Id. at 939-940. That is, the question is whether “one patent claims an obvious variation of that which the other patent claims.” Id. at 941. In the present matter, that means the pending utility application claims must be an obvious variation of the design patent claim; and conversely the design patent claim must be an obvious variation of the pending utility application claims. This is referred to as a two-way inquiry. See MPEP § 804.

The Examiner clearly has not satisfied this two-way inquiry. A review of the January 24<sup>th</sup> Official Action, and the preceding Official Actions, clearly shows that the Examiner has only engaged in a “one-way” inquiry. Specifically, the Examiner only argued that the pending utility application claims are an obvious variation of the design patent claims. He does not complete the requisite analysis by establishing that the design patent claim is an obvious variation of the pending utility application claims.

Furthermore, the Federal Circuit has cautioned that in applying this two-way double patenting test in the design/utility context, “there is a heavy burden of proof on one seeking to show double patenting . . . . Double patenting is rare in the context of utility versus design patents.” Carman Industries, 724 F.2d at 940 (footnotes and citations omitted).

Clearly, because the Examiner has engaged in only one half of the requisite two-way analysis, he cannot have met this "heavy burden of proof."

Accordingly, based on the foregoing reasons, it is submitted that the Examiner has failed to establish the requisite double-patenting rejection, and therefore the Board is requested to reverse the Examiner's rejections in this regard.

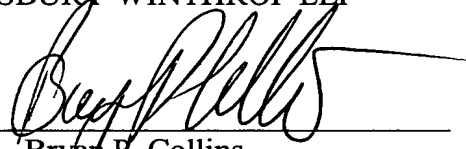
IX. Conclusion

In conclusion, the Applicants respectfully submit that, based on the reasons advanced above, the Examiner has failed to establish the prima facie case necessary to support an obviousness rejection under § 103(a). Additionally, the Examiner has also failed to properly establish the requisite case for obviousness-type double-patenting. Accordingly, reversal of the Examiner's rejections with respect to claims 1, 3-9, 16 and 23 is requested.

Respectfully submitted,

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## APPENDIX

1. A low profile hacksaw comprising:

an elongated blade having opposing longitudinal end portions and a cutting edge between said longitudinal end portions;

a hacksaw frame assembly comprising a rigid I-beam frame member with upper and lower end caps and a generally vertical web member extending therebetween, said frame member having a forward end portion, a maximum height portion, and an arcuate portion defined along at least one arc having a center of curvature located below said blade when said hacksaw is oriented in an upright position with the cutting edge of the blade facing downwardly, said arcuate portion extending substantially the entire length between said forward end portion and the maximum height portion and curving downwardly and forwardly towards said forward end portion to provide said hacksaw with a lower overall height at the forward end portion of said frame member than at the maximum height portion, said maximum height portion being defined at the point where both the distance between said blade and said lower end cap is a maximum and the arcuate portion begins its downward and forward curvature;

a first blade mounting structure carried by the hacksaw frame assembly, one of said longitudinal end portions of said blade being removably mounted on said first blade mounting structure;

a releaseable blade tensioning device carried by the hacksaw frame assembly and providing a second blade mounting structure on which the other of said longitudinal end portions of said blade is removably mounted, said blade tensioning device being movable to (a) affect relative tensioning movement between said first and second blade mounting structures to tension said blade in the longitudinal direction thereof, and (b) to affect relative releasing movement between said first and second blade mounting structures to release the tension to allow for removal and replacement of said blade;

one of said first and second blade mounting structures being provided on said forward end portion of said frame member such that the tension in said blade caused by the relative tensioning movement of said blade mounting structures applies a rearwardly directed load to said forward end portion to create a bending moment which is distributed along said arcuate portion with said upper end cap along said arcuate portion being subject to tension and said lower end cap along said arcuate portion being subject to compression so that said upper and lower end caps cooperate to resist deflection of said frame member; and

said hacksaw frame assembly further comprising a manually engageable handle connected to said frame member for being manually grasped to enable performance of a cutting operation wherein the cutting edge of the tensioned blade is engaged with a work piece and moved forwardly and rearwardly to cut the work piece.

3. A low profile hacksaw according to claim 1, wherein the lower end cap of said I-beam frame member extends arcuately from a rearward end portion of said frame member to the forward end portion of said frame member along a portion of the circumference of a first imaginary circle having a first centerpoint located below said blade, said maximum height portion being defined at said rearward end portion;

said upper end cap of said I-beam frame member extending arcuately from the rearward end portion of said frame member to the forward end portion of said frame member along a portion of the circumference of a second imaginary circle having a second centerpoint located below said blade.

4. A low profile hacksaw according to claim 3, wherein the radius of said second imaginary circle is greater than the radius of said first imaginary circle.

5. A low profile hacksaw according to claim 4, wherein said first and second centerpoints are spaced apart from one another.

6. A low profile hacksaw according to claim 5, wherein the radius of said first imaginary circle is between 8 and 18 inches.

7. A low profile hacksaw according to claim 6, wherein the radius of said second imaginary circle is between 10 and 20 inches.

8. A low profile hacksaw according to claim 7, wherein the radius of said first imaginary circle is approximately 12.7 inches.

9. A low profile hacksaw according to claim 7, wherein the radius of said second imaginary circle is approximately 10.75 inches.

16. A hacksaw according to claim 1, wherein said at least one arc comprises only one arc which extends substantially the entire length of said arcuate portion.

23. A low profile hacksaw according to claim 1, wherein said first blade mounting structure is provided on said forward end portion of said frame member.